

# TEF-3 (Y-12): sc-109083

## BACKGROUND

TEF-3, also known as TEAD4 (TEA domain family member 4), RTEF1, EFTR-2, TEFR-1, TCF13L1 or hRTEF-1B, is a 427 amino acid member of the transcriptional enhancer factor (TEF) family of proteins that are characterized by the presence of a TEA DNA-binding domain. Localized to the nucleus and expressed primarily in skeletal muscle, TEF-3 functions as a transcriptional regulator by binding specifically and non-cooperatively to the M-CAT motif found in the promoters of muscle-specific genes, thereby directing their subsequent expression. TEF-3 contains one TEA DNA-binding domain and is expressed as multiple isoforms due to alternative splicing events.

## REFERENCES

1. Stewart, A.F., et al. 1996. Cloning of human RTEF-1, a transcriptional enhancer factor-1-related gene preferentially expressed in skeletal muscle: evidence for an ancient multigene family. *Genomics* 37: 68-76.
2. Hsu, D.K., et al. 1996. Identification of a murine TEF-1-related gene expressed after mitogenic stimulation of quiescent fibroblasts and during myogenic differentiation. *J. Biol. Chem.* 271: 13786-13795.
3. Jacquemin, P., et al. 1996. A novel family of developmentally regulated mammalian transcription factors containing the TEA/ATTS DNA binding domain. *J. Biol. Chem.* 271: 21775-21785.
4. Vassilev, A., et al. 2001. TEAD/TEF transcription factors utilize the activation domain of YAP65, a Src/Yes-associated protein localized in the cytoplasm. *Genes Dev.* 15: 1229-1241.
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6. Chen, H.H., et al. 2004. Transcription enhancer factor-1-related factor-transgenic mice develop cardiac conduction defects associated with altered connexin phosphorylation. *Circulation* 110: 2980-2987.
7. Yagi, R., et al. 2007. Transcription factor TEAD4 specifies the trophoderm lineage at the beginning of mammalian development. *Development* 134: 3827-3836.
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## CHROMOSOMAL LOCATION

Genetic locus: TEAD4 (human) mapping to 12p13.33; Tead4 (mouse) mapping to 6 F3.

## SOURCE

TEF-3 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TEF-3 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109083 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-109083 X, 200 µg/0.1 ml.

## APPLICATIONS

TEF-3 (Y-12) is recommended for detection of TEF-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TEF family members.

TEF-3 (Y-12) is also recommended for detection of TEF-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TEF-3 siRNA (h): sc-96187, TEF-3 siRNA (m): sc-154179, TEF-3 shRNA Plasmid (h): sc-96187-SH, TEF-3 shRNA Plasmid (m): sc-154179-SH, TEF-3 shRNA (h) Lentiviral Particles: sc-96187-V and TEF-3 shRNA (m) Lentiviral Particles: sc-154179-V.

TEF-3 (Y-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TEF-3: 48 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.


 MONOS  
 Satisfaction  
 Guaranteed

Try **TEF-3 (B-5): sc-390578** or **TEF-3 (N-G2): sc-101184**, our highly recommended monoclonal alternatives to TEF-3 (Y-12).